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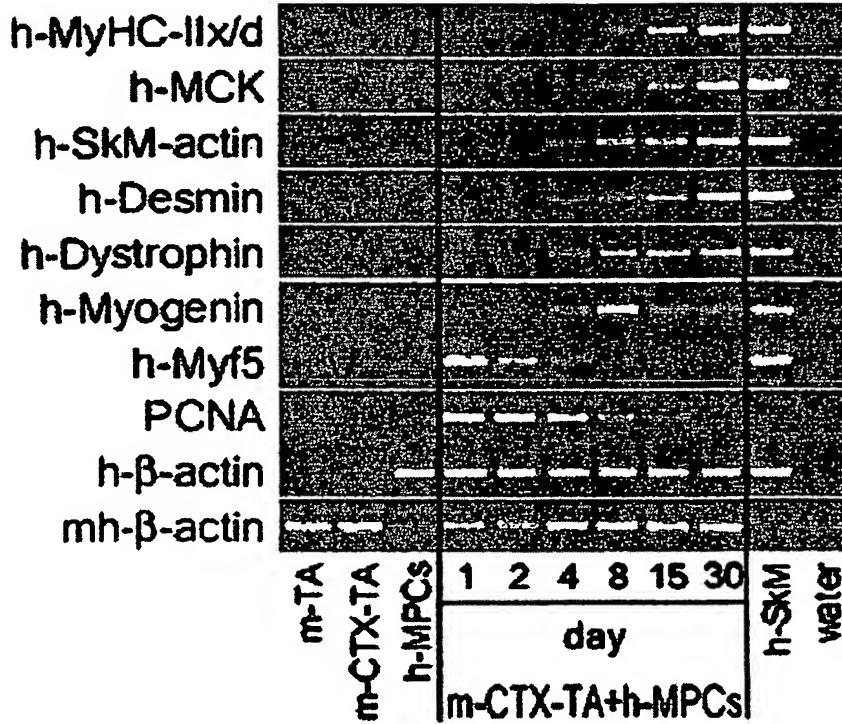
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(54) Title: COMPOSITIONS COMPRISING MUSCLE PROGENITOR CELLS AND USES THEREOF



(57) Abstract: The present invention shows the *in vivo* myogenic differentiation of muscle progenitor cells (MPCs), being derived from joint tissue, in a mouse model of skeletal muscle regeneration. MPCs participated in the regeneration process by long-term persistence and contribution to the compartment of myonuclei and the pool of functional satellite cells. When injected into dystrophic muscles of immunosuppressed mdx mice, human MPCs restored dystrophin in some fibers, and rescued the expression of mouse mechano-growth factor. In addition, the human MPCs derived from synovial membrane were injected into infarcted myocardial muscle. The MPCs engrafted successfully, underwent proliferation and differentiation leading to functional recovery and maintenance of the cardiac muscle. MPCs represent an alternative source of myogenic cells in therapeutic approaches for postnatal skeletal and cardiac muscle repair.